Claims 4, 8, 9, 13, 17, 18, 20, 21, 23, 24, 26, 27, 29, and 30 have been amended as follows:

1.   (Original) An adaptive slicer threshold generation system, comprising:

a first moving average filter to determine a first average value of a first binary signal;

a second moving average filter to determine a second average value of a second binary signal; and

a combiner to combine the first average value of the first binary signal and the second average value of the second binary signal to generate a combined output.

2.   (Original) The adaptive slicer threshold generation system according to claim 1, wherein the adaptive slicer threshold generation system further includes a gain element to set a value of a slicer threshold within a data eye.

3.   (Original) The adaptive slicer threshold generation system according to claim 1, wherein at least one of the first moving average filter and the second moving average filter includes a leakage element to control an adaptation rate of the slicer threshold.

4.   (Currently Amended) ~~The adaptive slicer threshold generation system according to claim 1,~~ An adaptive slicer threshold generation system, comprising:

a first moving average filter to determine a first average value of a first binary signal;

a second moving average filter to determine a second average value of a second

binary signal, wherein at least one of the first moving average filter and the second

moving average filter includes

a first delay element to delay a received binary signal;

a second combiner to combine the received binary signal, a delayed

binary signal from the first delay element, and a delayed output signal from a

second delay element; and

a second gain element to manipulate an output signal from the second

combiner, wherein the second delay element delays the output signal that is

combined by the second combiner with the received binary signal and the

delayed binary signal; and

a combiner to combine the first average value of the first binary signal and the

second average value of the second binary signal to generate a combined output.

5.   (Original) An adaptive slicer threshold generation system, comprising:

a minimum detector to determine a minimum value of a binary one;

a peak detector to determine a maximum value of a binary zero; and

a combiner to combine the minimum value of the binary one and the maximum

value of the binary zero to generate a combined output.

6.   (Original) The adaptive slicer threshold generation system according to claim 5,

wherein the adaptive slicer threshold generation system further includes a gain element

to set a value of a slicer threshold within a data eye.

7. (Original) The adaptive slicer threshold generation system according to claim 5, wherein at least one of the minimum detector and the peak detector includes a leakage element to control an adaptation rate of the slicer threshold.

8. (Currently Amended) ~~The adaptive slicer threshold generation system according to claim 5,~~ An adaptive slicer threshold generation system, comprising:

a minimum detector to determine a minimum value of a binary one, wherein the minimum detector includes

a minimum comparator to compare a received binary signal with a delayed output signal from a second combiner; and

a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the minimum comparator, wherein

the second combiner combines the output signal from the minimum comparator with a leakage signal from a second gain element, and

the second gain element manipulates the output signal from the second combiner;

a peak detector to determine a maximum value of a binary zero; and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

9. (Currently Amended) ~~The adaptive slicer threshold generation system according to claim 5,~~ An adaptive slicer threshold generation system, comprising:

a minimum detector to determine a minimum value of a binary one;

a peak detector to determine a maximum value of a binary zero, wherein the peak detector includes a peak comparator to compare a received binary signal with a delayed output signal from a second combiner, and a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the minimum comparator, the second combiner combining an output signal from the peak comparator with a leakage signal from a second gain element, and the second gain element manipulating the output signal from the second combiner; and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

10.   (Original) A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit, having

a first moving average filter to determine a first average value of a first binary signal,

a second moving average filter to determine a second average value of a second binary signal, and

a combiner to combine the first average value of the first binary signal and the second average value of the second binary signal to generate a combined output.

11. (Original) The receiver system according to claim 10, wherein the adaptive slicer threshold generation system further includes a gain element to set a value of a slicer threshold within a data eye.

12. (Original) The receiver system according to claim 10, wherein at least one of the first moving average filter and the second moving average filter includes a leakage element to control an adaptation rate of the slicer threshold.

13. (Currently Amended) ~~The receiver system according to claim 10,~~ A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit, having

a first moving average filter to determine a first average value of a first binary signal,

a second moving average filter to determine a second average value of a second binary signal, wherein at least one of the first moving average filter and the second moving average filter includes a first delay element to delay a received binary signal, a second combiner to combine the received binary signal, a delayed binary signal from the first delay element, and a delayed output signal from a second delay element, and a second gain element to manipulate an output signal from the second combiner, the second delay element delaying the

output signal that is combined by the second combiner with the received binary

signal and the delayed binary signal, and

a combiner to combine the first average value of the first binary signal and

the second average value of the second binary signal to generate a combined

output.

14.   (Original) A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit,

having

a minimum detector to determine a minimum value of a binary one,

a peak detector to determine a maximum value of a binary zero, and

a combiner to combine the minimum value of the binary one and the

maximum value of the binary zero to generate a combined output.

15.   (Original) The receiver system according to claim 14, wherein the adaptive slicer

threshold generation system further includes a gain element to set a value of a slicer

threshold within a data eye.

16.   (Original) The receiver system according to claim 14, wherein at least one of the

minimum detector and the peak detector includes a leakage element to control an

adaptation rate of the slicer threshold.

17. (Currently Amended) ~~The receiver system according to claim 14,~~ A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit, having

a minimum detector to determine a minimum value of a binary one, the minimum detector including a minimum comparator to compare a received binary signal with a delayed output signal from a second combiner, and a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the minimum comparator, the second combiner, combining the output signal from the minimum comparator with a leakage signal from a second gain element, and the second gain element manipulating the output signal from the second combiner,

a peak detector to determine a maximum value of a binary zero, and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

18. (Currently Amended) ~~The receiver system according to claim 14,~~ A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit, having

a minimum detector to determine a minimum value of a binary one,

a peak detector to determine a maximum value of a binary zero, wherein the peak detector includes

a peak comparator to compare a received binary signal with a delayed output signal from a second combiner; and

a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the peak comparator, wherein the second combiner combines an output signal from the peak comparator with a leakage signal from a second gain element, and the second gain element manipulates the output signal from the second combiner, and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

19. (Original) A method of generating an adaptive slicer threshold, comprising:

determining a first average value by combining a first received binary signal and a first delayed binary signal;

determining a second average value by combining a second received binary signal and a second delayed binary signal;

combining the first average value and the second average value to generate a combined output; and

setting a value of a slicer threshold within a data eye.

20.	(Currently Amended) ~~The method according to claim 19,~~ A method of generating an adaptive slicer threshold, comprising:

determining a first average value by combining a first received binary signal and a first delayed binary signal, wherein the first average value is further determined by combining a first leakage signal with the first received binary signal and the first delayed binary signal;

determining a second average value by combining a second received binary signal and a second delayed binary signal;

combining the first average value and the second average value to generate a combined output; and

setting a value of a slicer threshold within a data eye.

21.	(Currently Amended) ~~The method according to claim 19,~~ A method of generating an adaptive slicer threshold, comprising:

determining a first average value by combining a first received binary signal and a first delayed binary signal;

determining a second average value by combining a second received binary signal and a second delayed binary signal, wherein the second average value is further determined by combining a second leakage signal with the second received binary signal and the second delayed binary signal;

combining the first average value and the second average value to generate a combined output; and

setting a value of a slicer threshold within a data eye.

22.   (Original) A method of generating an adaptive slicer threshold, comprising:

determining a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal;

determining a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal;

combining the minimum value of the binary one and the maximum value of the binary zero to generate a combined output; and

setting a value of a slicer threshold within a data eye.

23.   (Currently Amended) ~~The method according to claim 22,~~ A method of generating an adaptive slicer threshold, comprising:

determining a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal, wherein the minimum value of the binary one is further determined by combining a first leakage signal with a first output signal;

determining a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal;

combining the minimum value of the binary one and the maximum value of the binary zero to generate a combined output; and

setting a value of a slicer threshold within a data eye.

24.   (Currently Amended) ~~The method according to claim 22,~~ A method of generating an adaptive slicer threshold, comprising:

determining a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal;

determining a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal, wherein the maximum value of the binary zero is further determined by combining a second leakage signal with a second output signal;

combining the minimum value of the binary one and the maximum value of the binary zero to generate a combined output; and

setting a value of a slicer threshold within a data eye.

25.   (Original) An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions to

determine a first average value by combining a first received binary signal and a first delayed binary signal,

determine a second average value by combining a second received binary signal and a second delayed binary signal,

combine the first average value and the second average value to generate a combined output, and

set a value of a slicer threshold within a data eye.

26.   (Currently Amended) ~~The system according to claim 25,~~

An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions to

determine a first average value by combining a first received binary signal and a first delayed binary signal, wherein the machine-readable program code further includes instructions to combine a first leakage signal with the first received binary signal and the first delayed binary signal to determine the first average value,

determine a second average value by combining a second received binary signal and a second delayed binary signal,

combine the first average value and the second average value to generate a combined output, and

set a value of a slicer threshold within a data eye.

27.   (Currently Amended)   ~~The system according to claim 25,~~

An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions to

determine a first average value by combining a first received binary signal and a first delayed binary signal,

determine a second average value by combining a second received binary signal and a second delayed binary signal, wherein the machine-readable program code

further includes instructions to combine a second leakage signal with the second

received binary signal and the second delayed binary signal to determine the second

average value,

combine the first average value and the second average value to generate a

combined output, and

set a value of a slicer threshold within a data eye.

28.   (Original) An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage

medium, the machine-readable program code having instructions to

determine a minimum value of a binary one by comparing a first received

binary signal with a first delayed output signal,

determine a maximum value of a binary zero by comparing a second

received binary signal with a second delayed output signal,

combine the minimum value of the binary one and the maximum value of

the binary zero to generate a combined output, and

set a value of a slicer threshold within a data eye.

29.   (Currently Amended) ~~The system according to claim 28,~~

An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage

medium, the machine-readable program code having instructions to

determine a minimum value of a binary one by comparing a first received binary

signal with a first delayed output signal, wherein the machine-readable program code

further includes instructions to combine a first leakage signal with a first output signal to

determine the minimum value of the binary one,

determine a maximum value of a binary zero by comparing a second received

binary signal with a second delayed output signal,

combine the minimum value of the binary one and the maximum value of the

binary zero to generate a combined output, and

set a value of a slicer threshold within a data eye.

30.   (Currently Amended)   ~~The system according to claim 28,~~

An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage

medium, the machine-readable program code having instructions to

determine a minimum value of a binary one by comparing a first received binary

signal with a first delayed output signal,

determine a maximum value of a binary zero by comparing a second received

binary signal with a second delayed output signal, wherein the machine-readable

program code further includes instructions to combine a second leakage signal with a

second output signal to determine the maximum value of the binary zero,

combine the minimum value of the binary one and the maximum value of the

binary zero to generate a combined output, and

set a value of a slicer threshold within a data eye.